

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. **(Currently Amended)** An apparatus for balancing a shaft of an aircraft engine comprising:

 a ~~round~~ plate defining a first group of holes axially extending therethrough, the round plate being co-axially attached to the shaft at a forward end of the shaft;

 and

 a nose cone mounted to the plate; and

 at least one standard fastener ~~for selectively engaging only the plate, the at least one~~ standard fastener engaging the plate through at least one of the holes in the first group to thereby add an asymmetric balancing weight to the plate relative to a rotational axis of the shaft.
2. **(Previously Amended)** An apparatus as claimed in claim 1 wherein the plate further comprises a mounting system independent of the first group of holes for mounting a nose cone to the plate.
3. **(Previously Amended)** An apparatus as claimed in claim 2 wherein the mounting system comprises a second group of holes axially extending through the plate for receiving mounting bolts.
4. **(Previously Amended)** An apparatus as claimed in claim 2 wherein the plate comprises a position element on a forward surface thereof for co-axially aligning the nose cone with the shaft.
5. **(Original)** An apparatus as claimed in claim 1 wherein the plate comprises a position element on a rear surface thereof for co-axially aligning the plate with the shaft.
6. **(Previously Amended)** An apparatus as claimed in claim 3 wherein the plate comprises a plurality of clinch nuts each attached to respective holes of the second group on a rear surface of the plate for engaging the respective mounting bolts.

7. **(Previously Amended)** An apparatus as claimed in claim 6 wherein the plate comprises means on its rear surface for restraining rotation of the respective clinch nuts.
8. **(Previously Amended)** An apparatus as claimed in claim 1 wherein at least one standard fastener is selected from a variety of standard screws having identical diameters but different lengths such that one of the screws with a selected length can be engaged in the at least one of the holes of the first group as the selected balance weight added to the plate.
9. **(Currently Amended)** An apparatus as claimed in claim 5 wherein the plate comprises a central aperture for receiving the shaft extending through the aperture with clearance between the shaft and the aperture, the plate being affixed to the shaft by a fan retaining nut secured to the forward end of the shaft, the plate being axially restrained between the fan retaining nut and a radial wall of a fan rotor of the aircraft engine, and the position element on the rear surface of the plate for co-axially aligning the plate with the shaft contacting an axial surface of the fan rotor.
10. **(Currently Amended)** An apparatus for an aircraft engine comprising:
 - a nose cone of the aircraft engine;
 - at least one balance weight element;
 - a member centrally mounted to a forward end of a rotatable shaft of the aircraft engine, the member including a mounting apparatus ~~by which mounting the nose cone is mounted to the member and~~ the member further including a balancing apparatus distinct from the mounting apparatus, and the balancing apparatus of the member adapted to retain retaining the at least one balance weight element to the member ~~asymmetrically relative to shaft rotation to thereby rotationally balance the shaft independently of the nose cone while the nose cone is mounted to the member.~~
11. **(Cancelled)**
12. **(Currently Amended)** An apparatus as claimed in ~~claim 11~~ claim 10 wherein the ~~respective at least one weight element and attachment points are~~ is configured to

- permit the at least one weight element to be attached to the member only from a forward side of the member.
13. **(Currently Amended)** An apparatus as claimed in ~~claim 11~~ claim 10 wherein the nose cone and the mounting apparatus are configured to permit the nose cone to be mounted to the member from a forward side of the member and cover the at least one balance weight element.
14. **(Currently Amended)** An apparatus as claimed in ~~claim 11~~ claim 10 wherein the member comprises a first positioning element to align the member with the shaft for the central mounting of the member to the shaft.
15. **(Currently Amended)** An apparatus as claimed in ~~claim 11~~ claim 10 wherein the member comprises a second positioning element to co-axially align the nose cone with the member.
16. **(Previously Amended)** A method of balancing a shaft of an aircraft engine, the shaft including a mounting plate for mounting a nose cone to one side of the mounting plate, the method comprising steps of:

with the nose cone unmounted, observing a rotational imbalance of the shaft; and

accessing the mounting plate through a front opening of a casing of the aircraft engine to install and affix at least one standard fastener in one of a plurality of axial holes of the mounting plate determined during the observation step to thereby rotationally balance the shaft.
17. **(Original)** A method as claimed in claim 16 comprising a step of selecting the at least one standard fastener from a plurality of standard fasteners having identical diameters and different lengths to provide a selected balance weight added to the plate.
18. **(Previously Amended)** A method as claimed in claim 17 further comprising a step of applying adhesive between the selected at least one standard fastener and the plate.
19. **(Original)** A method as claimed in claim 17 further comprising a step of mounting the nose cone to the mounting plate after the shaft is rotationally balanced,

a wall of the nose cone providing additional retention to the fastener received in the hole.

20. (New) The apparatus as claimed in claim 1 wherein the nose cone defines a groove configured to accommodate a section of the at least one fastener projecting from the plate.
21. (New) The apparatus as claimed in claim 10 wherein the nose cone defines a groove configured to accommodate a section of the at least one balancing weight element projecting from the member.